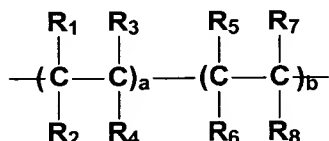


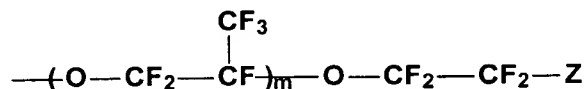
in which m is a number from 1 to 100; and Z is selected from the group consisting of SO₂F, SO₃H, SO₃⁻M^{v+}, COF, CO₂H, and CO₂⁻M^{v+}, wherein v is the valence of M and M is a cation selected from Group I, Ia, IIa, IIb, IIIa, IIIb, IVa, IVb, and transition elements.

2. (Amended) The golf ball of [any] claim 1 wherein said [outer surface] cover layer is comprised of about 100 wt% of said functionalized fluoropolymer.

3. (Amended) A golf ball having at least [an outer surface] a cover layer formed of a material selected from the group consisting of thermoplastic materials and thermosetting materials, wherein the improvement comprises applying upon said [outer surface at least one layer of] cover layer [a] at least one coating layer [material], said coating layer [material] comprising at least one functionalized fluoropolymer, wherein said fluoropolymer has the formula



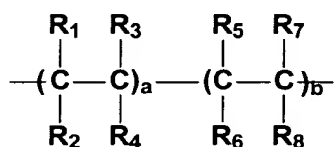
in which a is a number from 1 to 100, b is a number from 99 to 1, R₁-R₇ are independently selected from the group consisting of H, F, alkyl, and aryl; wherein at least one of R₁-R₇ is F; and R₈ is [H, F, or] a moiety of the formula



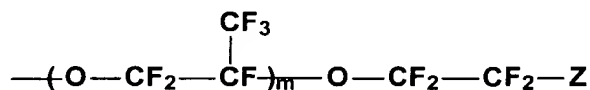
in which m is a number from 1 to 18; and Z is selected from the group consisting of SO₂F, SO₃H, SO₃⁻M^{v+}, COF, CO₂H, and CO₂⁻M^{v+}, wherein v is the valence of M and M is a cation selected from Group I, Ia, IIa, IIb, IIIa, IIIb, IVa, IVb, and transition elements.

4. (Amended) The golf ball of claim 3 wherein [said] at least one coating layer [material] is comprised of up to about 100 wt% of said functionalized fluoropolymer.

5. (Amended) A golf ball having [an outer surface] a cover layer, said golf ball having at least one coating layer deposited upon said [outer surface] cover layer, said [outer surface] cover layer formed of a material selected from the group consisting of thermoplastic materials and thermosetting materials, wherein at least said [outer surface] cover layer and [said] at least one coating layer comprise at least one functionalized fluoropolymer, wherein said fluoropolymer has the formula

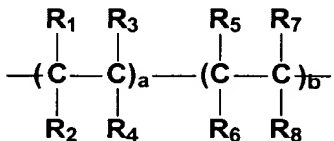


in which a is a number from 1 to 100; b is a number from 99 to 1; R₁-R₇ are each selected from the group consisting of H, F, alkyl, and aryl; wherein at least one of R₁-R₇ is F; and R₈ is a moiety of the formula

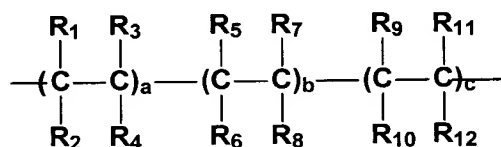


in which m is a number from 1 to 18; and Z is selected from the group consisting of SO₂F, SO₃H, SO₃M^{v+}, COF, CO₂H, and CO₂M^{v+}, wherein v is the valence of M and M is a cation selected from Group I, Ia, IIa, IIb, IIIa, IIIb, IVa, IVb, and transition elements.

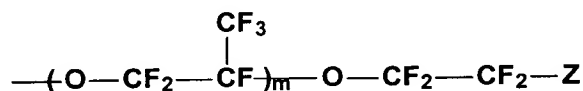
6. (Amended) A golf ball having a cover layer wherein the improvement comprises forming at least said cover layer of a thermoplastic material comprising at least one functionalized fluoropolymer, wherein said fluoropolymer has the formula [



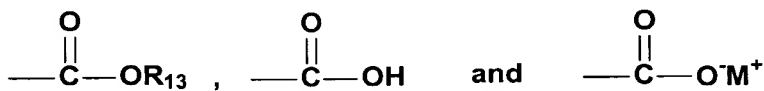
The golf ball of any of claims 1, 3 or 5 wherein said fluoropolymer is a terpolymer having the formula]



wherein a is a number from 1 to 100; b is a number from 99 to 1; c is a number from 1 to 50 ;
R₁-R₇ are each selected from the group consisting of H, F, alkyl, and aryl; wherein at least
one of R₁-R₇ is F; and R₈ is a moiety of the formula

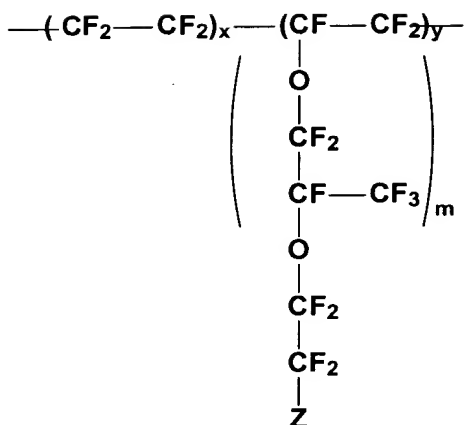


in which m is a number from 1 to 18; and Z is selected from the group consisting of SO₂F,
SO₃H, SO₃M^{v+}, COF, CO₂H, and CO₂M^{v+}, wherein v is the valence of and M is a cation
selected from Group I, Ia, IIa, IIb, IIIa, IIIb, IVa, IVb, and transition elements; R₉-R₁₁ are
independently selected from the group consisting of H, F, alkyl and aryl; and R₁₂ is selected
from the group consisting of



wherein R₁₃ is a C₁-C₁₂ linear or branched chain alkyl group.

7. (Amended) The golf ball of any claims 1, 3 or 5, wherein said fluoropolymer has the formula



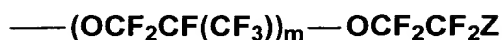
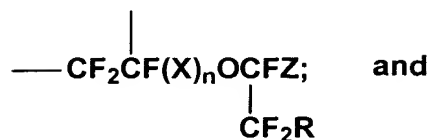
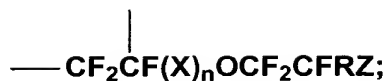
wherein m is 1-12; x is 1-100; y is 99 to 1; and Z is selected from the group consisting of SO₂F, SO₃H, SO₃⁻M^{v+}, COF, CO₂H, and CO₂⁻M^{v+}, wherein v is the valence of M and M is a cation selected from Group I, Ia, IIa, IIb, IIIa, IIIb, IVa, IVb, and transition elements.

9. (Amended) The golf ball of any one of claims 1, 3 or 5, wherein said fluoropolymer is formed by copolymerizing perfluoroethylene or a perfluoro-α-olefin with a vinyl ether having a structure selected from the group consisting of



wherein X is O(CF₂)₂₋₁₀, OCF₂CFY, or OCFYCF₂, with Y = F or CF₃; Z is selected from the group consisting of SO₂F, SO₃H, SO₃⁻M^{v+}, COF, CO₂H, and CO₂⁻M^{v+}, wherein v is the valance of M and M is a cation selected from Group I, Ia, IIa, IIb, IIIa, IIIb, IVa, IVb and transition elements; R is F or a perfluoroalkyl group having up to 10 carbon atoms; and n is 0, 11, or 2.

10. (Amended) The golf ball of any one of claims 1, 3 or 5 wherein said fluoropolymer has molecular units selected from the group consisting of



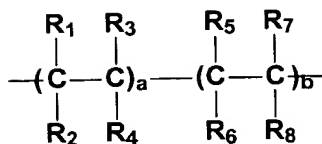
wherein X is $\text{O}(\text{CF}_2)_{2-10}$, OCF_2CFY or OCFYCF_2 , with $\text{Y}=\text{F}$ or CF_3 ; Z is selected from the group consisting of SO_2F , SO_3H , $\text{SO}_3^-\text{M}^{v+}$, COF , CO_2H and $\text{CO}_2^-\text{M}^{v+}$, wherein v is the valence of M and M is a cation selected [for the] from Group I, Ia, IIa, IIb, IIIa, IIIb, IVa, IVb and transition elements; R is F or a perfluoroalkyl group having up to 10 carbon atoms; n is 0, 1 or 2; and m is 7-10.

12. (Amended) The golf ball of claim 1 or 5 wherein said fluoropolymer comprises from about 10 to about 90% of at least said [outer surface] cover layer and wherein about 10% of said [outer surface] cover layer is comprised of one or more non-fluorinated thermoplastic polymers selected from the group consisting of ionomeric polymers, non-ionomeric polymers, and mixtures thereof.

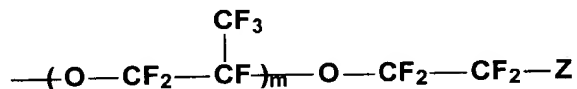
13. (Amended) The golf ball of claim 1 or 5 wherein said ball comprises at least one cover layer and a core[, and wherein said outer surface comprises said cover layer].

18. (Amended) A method of enhancing the cut and abrasion resistance of a golf ball comprising the steps of:

- a) forming a golf ball core; and
- b) forming a cover around said core by molding a cover stock material comprising a fluoropolymer about said core, wherein said fluoropolymer has the formula

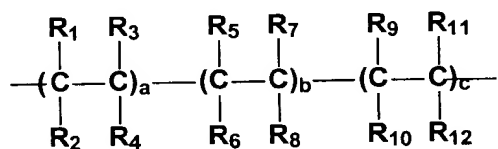


in which a is a number from 1 to 100; b is a number from 99 to 1; R₁-R₇ are independently selected from the group consisting of H, F, alkyl, and aryl; wherein at least one of R₁-R₇ is F; and R₈ is [H, F or] a moiety of the formula

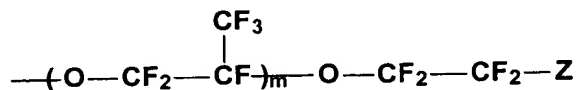


in which m is a number from 1 to 18; and Z is selected from the group consisting of SO₂F, SO₃H, SO₃⁻M^{v+}, COF, CO₂H, and CO₂⁻M^{v+}, wherein v is the valence of M and M is a cation selected from Group I, Ia, IIa, IIb, IIIa, IIIb, IVa, IVb, and transition elements.

19. (Amended) The method of claim 18 which further comprises choosing a cover stock material comprising a fluoropolymer, wherein said fluoropolymer is a terpolymer having the formula

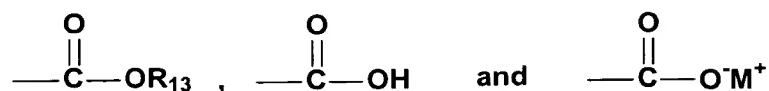


wherein a is a number from 1 to 100; b is a number from 99 to 1; c is a number [form] from 1 to 50; R₁-R₇ are each selected from the group consisting of H, F, alkyl, and aryl; wherein at least one of R₁-R₇ is F; and R₈ is a moiety of the formula



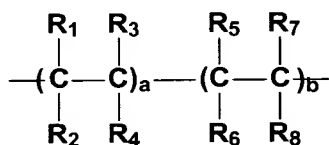
in which m is a number from 1 to 18; and Z is selected from the group consisting of SO₂F, SO₃H, SO₃⁻M^{v+}, COF, CO₂H, and CO₂⁻M^{v+}, wherein v is the valence of M and M is a cation selected from Group I, Ia, IIa, IIb, IIIa, IIIb, IVa, IVb, and transition elements; R₉-R₁₁ are

independently selected from the group consisting of H, F, alkyl and aryl; and R₁₂ is selected from the group consisting of

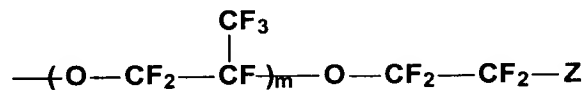


wherein R₁₃ is a C₁-C₁₂ linear or branched chain alkyl group.

22. (Amended) A method of enhancing the cut resistance, abrasion resistance, and durability of a golf ball which comprises forming a golf ball and applying to the golf ball a coating composition comprising a fluoropolymer, wherein said fluoropolymer has the formula

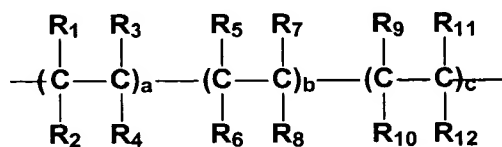


in which a is a number from 1 to 100; b is a number from 99 to 1; R₁-R₇ are independently selected from the group consisting of H, F, alkyl, and aryl; wherein at least one of R₁-R₇ is F; and R₈ is [H, F, or] a moiety of the formula

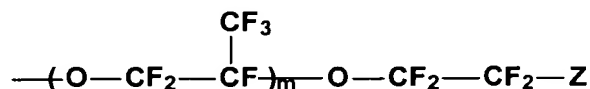


in which m is a number from 1 to 18[:]; and Z is selected from the group consisting of SO₂F, SO₃H, SO₃⁻M⁺, COF, CO₂H, and CO₂⁻M⁺, wherein v is the valence of M and M is a cation selected from Group I, Ia, IIa, IIb, IIIa, IIIb, IVa, IVb, and transition elements.

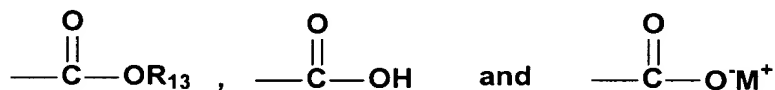
23. (Amended) The method of claim 22 which further comprises applying to said golf ball a coating composition comprising a fluoropolymer, wherein said fluoropolymer is a terpolymer having the formula



wherein a is a number from 1 to 100; b is a number from 99 to 1; c is a number [form] from 1 to 50; R₁-R₇ are each selected from the group consisting of H, F, alkyl, and aryl; wherein at least one of R₁-R₇ is F; and R₈ is a moiety of the formula



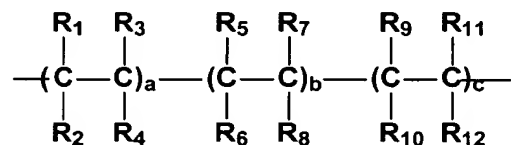
in which m is a number from 1 to 18; and Z is selected from the group consisting of SO₂F, SO₃H, SO₃M^{v+}, COF, CO₂H, and CO₂M^{v+}, wherein v is the valence of M and M is a cation selected from Group I, Ia, IIa, IIb, IIIa, IIIb, IVa, IVb, and transition elements; R₉-R₁₁ are independently selected from the group consisting of H, F, alkyl and aryl; and R₁₂ is selected from the group consisting of



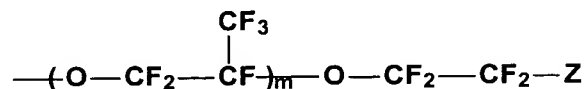
wherein R₁₃ is a C₁-C₁₂ linear or branched chain alkyl group.

24. (New) The golf ball of claim 1 wherein the golf ball has at least one coating layer over the cover layer.

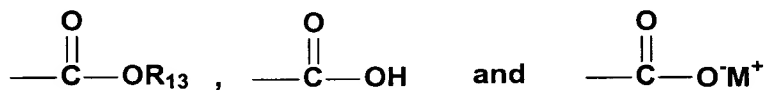
25. (New) A golf ball having at least a cover layer formed of a material selected from the group consisting of thermoplastic materials and thermosetting materials, wherein the improvement comprises applying upon said cover layer at least one coating layer, said coating layer comprising at least one functionalized fluoropolymer, wherein said fluoropolymer has the formula



wherein a is a number from 1 to 100; b is a number from 99 to 1; c is a number from 1 to 50; R_1 - R_7 are each selected from the group consisting of H, F, alkyl, and aryl; wherein at least one of R_1 - R_7 is F; and R_8 is a moiety of the formula



in which m is a number from 1 to 18; and Z is selected from the group consisting of SO_2F , SO_3H , $\text{SO}_3^-\text{M}^{v+}$, COF , CO_2H , and $\text{CO}_2^-\text{M}^{v+}$, wherein v is the valence of and M is a cation selected from Group I, Ia, IIa, IIb, IIIa, IIIb, IVa, IVb, and transition elements; R_9 - R_{11} are independently selected from the group consisting of H, F, alkyl and aryl; and R_{12} is selected from the group consisting of



wherein R_{13} is a C_1 - C_{12} linear or branched chain alkyl group.

26. (New) A golf ball having a cover layer, said golf ball having at least one coating layer deposited upon said cover layer, said cover layer formed of a material selected from the group consisting of thermoplastic materials and thermosetting materials, wherein at least said cover layer and at least one coating layer comprise at least one functionalized fluoropolymer, wherein said fluoropolymer has the formula

